



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,844	02/17/2005	Daisuke Uesugi	122799	1879
25944 7590 11/07/2008 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
GRUN, ROBERT J				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
11/07/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/524,844

Applicant(s)

UESUGI ET AL.

Examiner

ROBERT J. GRUN

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I Claims 1-5 and 8-15 in the reply filed on September 18, 2008 is acknowledged. The traversal is on the ground(s) that the common technical feature includes not only the features already found by the examiner but also the method step of "squeezing the bead, ring heated to the heat deformable temperature, from outside so as to form an outer diameter of the bead ring within a dimensional tolerance for deformation". This is not found persuasive because compression of the neck in the crystallization step is also known in the art, as evidenced by Yoshino et al. (US Patent No. 4,386,046) and Koch et al. (PG Pub. No. 2001/0028930).

The requirement is still deemed proper and is therefore made FINAL. Accordingly claims 6 and 7 are withdrawn from consideration by the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshino et al. (US Patent No. 4,386,046) in view of Collette et al. (US Patent No. 6,217,818).

- Regarding Claim 1: Yoshino et al. teach a method of orienting (crystallizing) the neck of bottles made of saturated polyester resins (such as PET (col. 1 line 16)). The method consist of a) heating the neck of the bottle (col. 3 lines 20-22) and b) inserting an orienting device which compresses the neck into the wall of the mold which forces the oriented neck to take the desired dimensions for the desired threading (col. 4 lines 11-21). While Yoshino et al. does not specifically refer to the crystallization of the neck (instead referring only to orientation), it is known by people having ordinary skill in the art that heating to a temperature between the T_g and T_m and then allowing the polymer to cool is one method to crystallize a polymer, further Yoshino et al. discloses that the threads can be formed with high accuracy because it is unnecessary to orient the neck thereafter (col. 4 lines 19-21). While Yoshino et al. does not teach a bottle having a neck ring or bead ring, Collette et al. teaches a preform with threads, a bead ring and a neck ring (Figures 2A, 2B, and 3). One of ordinary skill in the art at the time of invention would have found it obvious to incorporate the teachings of Collette et al. into the teachings of Yoshino et al. in order to form a bottle with improved sealing capability formed by the bead ring.
- Regarding Claim 2: Yoshino et al. and Collette et al. teach the invention as described above in the rejection of Claim 1. Collette et al. further teaches that additional layers may also be included such as an MXD-6 nylon barrier layer (col. 3 lines 8-12). One of ordinary skill in the art would have found adding an additional barrier layer to the bottle of Yoshino et al. in order to decrease its gas permeability, making it useful for beverage containers.

- Regarding Claims 3 and 8: Yoshino et al. and Collette et al. teach the invention as described above in the rejection of Claims 1 and 2, respectively. Given the teachings of Yoshino et al. in view of Collette et al., one of ordinary skill in the art at the time of invention would have found it obvious to squeeze (compress, mold) the neck portion of the bottle to the desired dimensions.
- Regarding Claims 4-5 and 9-13: Yoshino et al. and Collette et al. teach the invention as described above in the rejection of Claims 1, 2, and 3 respectively. While Yoshino et al. does not disclose the time elapsed from the heating to the molding step nor the amount of time for which the bead/threads are molded and given the similarities in process steps from the current application and Yoshino et al. it is the examiners position that these times are result effective variables and as such it is well within the skill of a routineer in the art to optimize process steps, such as the time between heating and molding and actual molding time, in order to maximize both efficiency and results.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT J. GRUN whose telephone number is (571)270-5521. The examiner can normally be reached on Monday-Thursday 07:30-17:00 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip C. Tucker can be reached on (571)272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ROBERT J GRUN/
Examiner, Art Unit 1791

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791